

## Characterising the Double Ringwork Enclosures of Gwynedd: Meillionydd Excavations, July and August 2013

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# **Characterising the Double Ringwork Enclosures of Gwynedd: Meillionydd Excavations**

**July and August 2013**

**Interim Report**



**Kate Waddington and Raimund Karl**

**Bangor: Gwynedd, January 2016**



## Bangor Studies in Archaeology

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**Cover image:** Working shot of all the excavation areas opened in the 2013 excavations, showing the roundhouse set into the outer bank in trench 2 west extension.

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## Contents

Introduction.....	1
The objectives of the 2013 excavations .....	1
Methodology .....	2
The excavations: preliminary results.....	3
Trench 1 West Extension.....	3
Trench 2 West Extension and Trench 2.....	11
Trench 4.....	22
Preliminary conclusions.....	22
Acknowledgements .....	24
References.....	25
Appendices .....	26
Small Finds Register.....	26
Sample Register .....	28

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## Introduction

Meillionydd is a 'double ringwork' enclosure dating to the first millennium BC. It is located near the village of Rhiw (NGR SH21902905), on the south-western end of the Llŷn Peninsula in Gwynedd, northwest Wales (Figure 1). A detailed location description and site description has already been provided in a previous report (Waddington and Karl 2010, 4-5) and thus will not be repeated here. The overall research context and objectives for this project have also been outlined in previous reports (Waddington 2010; Waddington and Karl 2010, 3-4; Karl and Waddington 2011). This report outlines the stratigraphic sequence excavated in the 2013 excavation season, which took place in July and August 2013 (please see previous interim reports for the first three excavation seasons: Waddington and Karl 2010; Waddington and Karl 2015a; and Waddington and Karl 2015b). The excavations continued the work of previous years on the eastern side of the enclosure, around the entrance-way to the site.

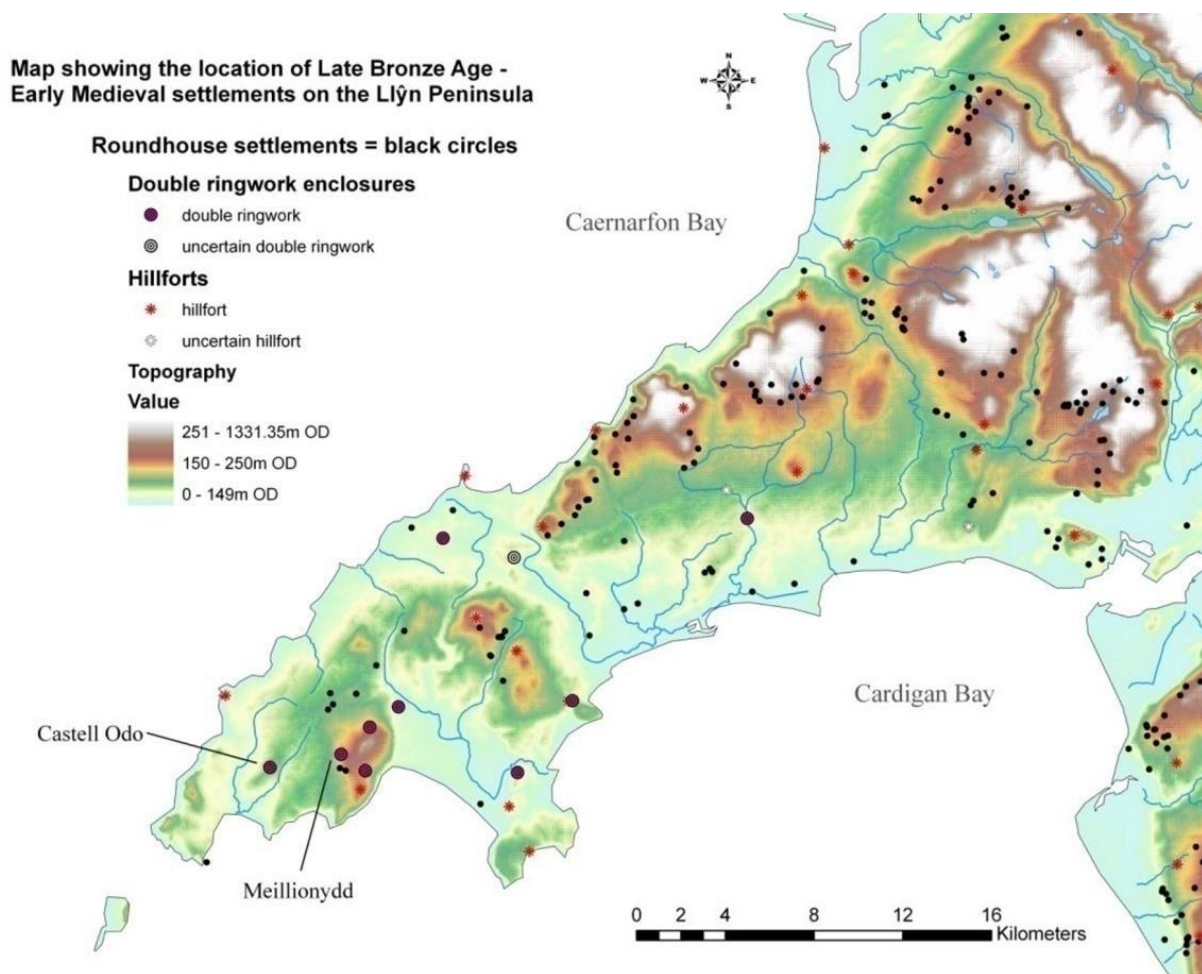


Figure 1: Map of the Llŷn Peninsula, showing the location of the site as well as all other later prehistoric hillfort and settlement sites in the area. The double ringwork enclosures are shown in purple circles, hillforts are shown in red stars and roundhouse settlements are shown in black dots (image: K. Waddington).

## The objectives of the 2013 excavations

This fourth excavation season aimed to reopen and complete excavations of all archaeological features, deposits, and structures in trench 1 west extension and trench 2 west extension. These

trenches form one large trench, c. 12m by 24m, and the 1m-wide bulk dividing the two extension trenches in 2012 was removed in the 2013 season. An additional 1m-wide bulk had been preserved over the outer bank in the lower part of trench 2 west extension, just behind the roundhouse, in 2012. Again, this bulk was removed and an 4m-wide section through the outer bank was excavated. Trench extensions were also made to the north to assess the continuation of the entrance passageway. This new area was labelled trench 4; the archaeology in this area was only exposed in 2013, and it was reopened and enlarged in 2014.

The overall objectives were to continue to collect data on the construction and phasing of the enclosure boundaries and buildings and to produce more datable materials or short-lived charcoal samples to build up a chronological sequence for these monuments in Gwynedd. The large trench aimed to:

- Expose and excavate the earlier u-shaped ditch that runs underneath the quarry hollow and the roundhouse in trench 2 west extension;
- Expose the entire 12m-stretch of the outer bank in trench 2 extension and complete the excavations of a 4m-wide stretch of this feature, assessing whether any pre-bank deposits or features exist in this area, and whether an outer ditch or quarry scoop is present in the area behind the bank;
- Complete the excavations of the stone-built roundhouse (set into the quarry hollow and outer bank) in trench 2 west extension, and thus complete excavations of the quarry hollow;
- Assess whether the roundhouse is set into the terminal of the quarry hollow, or whether the quarry hollow continues to the north of this trench;
- Excavate the metalled surface in trench 2 west extension and assess its stratigraphic relationship with the roundhouse;
- Investigate the extent of the metalled surface, making trench extensions to the north in a new area labelled Trench 4;
- Complete the excavations of the working section through the inner bank and metalled surface preserved in the enclosure entrance-way in trench 1 west extension;
- Expose and excavate the large pits identified in the eastern end of trench 1 west extension in 2012, and assess whether any additional deposits or features are preserved beneath the inner bank and metalled surface;
- Remove the bulk separating trench 1 west extension from trench 2 west extension and assess whether any features exist in this area (which lies between the inner bank and quarry hollow).

## Methodology

The excavations were carried out in the stratigraphic method (Harris 1989; Harris et al. 1993). All contexts were recorded in single context recording on standard context record sheets, as were small find and samples. In addition, where appropriate, single and multiple context plans and sections were drawn on permatrace. Digital documentation photographs of features and quadrants / trenches were taken in RAW format using a Pentax \*istDL2 digital SLR camera with a SMC Pentax DA 18-55 mm F3.5-5.6 AL lens at 6 Megapixel resolution. In addition, digital photographs for three-dimensional photographic recording were taken in RAW and JPEG format using a Nikon D50 digital SLR camera with a AF-S DX 18-55mm F3.5-5.6G ED lens at 6 Megapixel and 1 Megapixel resolution respectively and processed using Agi Soft Photo Scan Standard Edition for creating 3D renderings.

The trenches were recorded as 3D survey points using a Leica GPS 1205 Smart Pole with  $\pm 1.5$  cm accuracy, averaged out of 4 independent measurements. All records, plans, photos and 3D measurements were taken by staff, students and volunteers under guidance and supervision of the excavation directors, who also checked the records for correctness and completeness. All students, and almost all volunteers, performed all these tasks (with the exception of surveying) at least once, in most cases repeatedly over the course of several days. Finds were recorded using standard finds record sheets, with individual team members responsible for finds recording and the excavation directors for keeping the site diary as well as the general excavation record book.

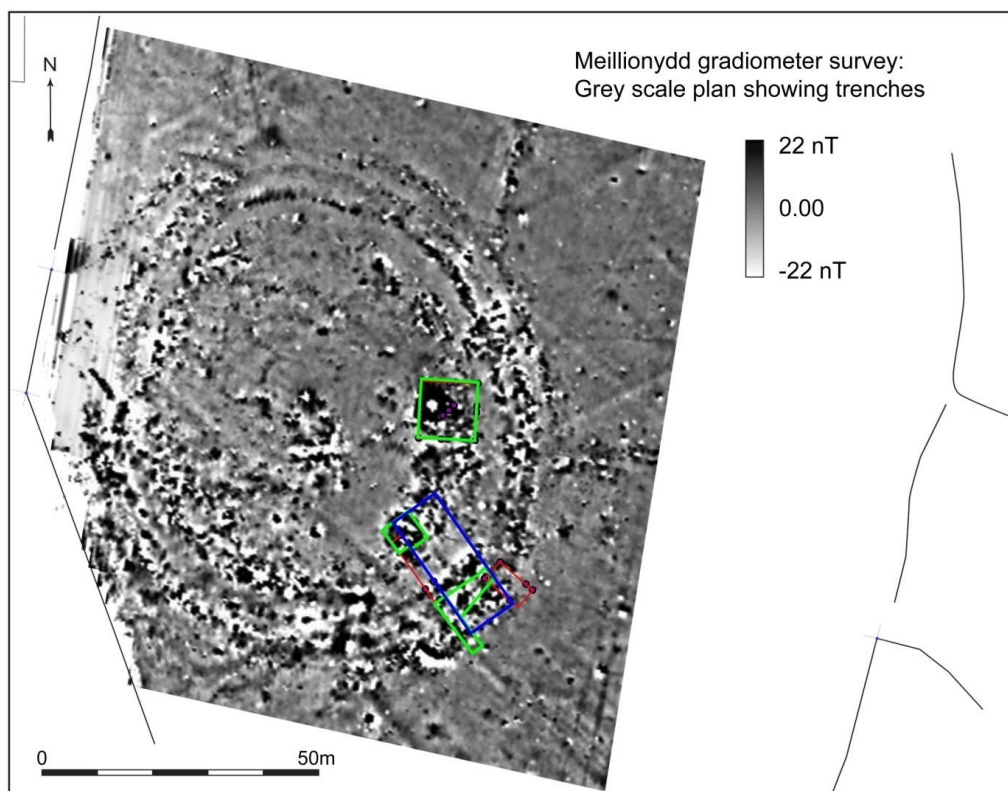


Figure 2: Geophysical survey of Meillionydd, showing (in blue) the position of the trench reopened in 2013 (adapted from Smith and Hopewell 2007, fig 11). The 2011 trenches are shown in bright green, and the 2010 trenches are shown in red.

## The excavations: preliminary results

### *Trench 1 West Extension*

Trench 1 west extension was reopened in order to remove the working section preserved through the in-turn to the inner bank and adjacent metallised surface running through the enclosure entrance-way (Figure 5). The 1m-wide working bulk separating the trench from trench 2 west extension was also removed and the archaeology identified in this strip will be tackled here. The earliest features in the area consisted of several postholes, notably a four-post setting in the north-eastern corner of the trench, and an alignment of postholes running north-south underneath the bulk, and terminating next to the four-post setting (Figure 6). Together, these features appear to form part of a timber boundary, which is probably contemporary with the U-shaped ditch identified beneath the quarry hollow in trench 2 west extension, and which also terminates near the four-post setting (see Figure 13, below, for plan of phase 1 enclosure and entrance-way). This suggests that the four-post setting



formed part of an entrance-structure or gate-house, and it therefore highlights the position of the earliest entrance to the enclosure. This interpretation is supported by the presence of a primary layer of metalling (656), which clearly ran through the four-post setting.



Figure 3: 3D photo reconstructions of trench 1 west extension, trench 2, and trench 2 west extension, also showing trench 1 (2010), trench 1 east extension (2011), and trench 1 west extension (2011). The image is orientated with north at the bottom, south at the top. The top image shows the trench at the end of the 2012 excavation season, with the working bulk dividing the two trenches (trench 1 west extension is on the right-hand side of the image). The bottom image shows the trench half way through the season, showing all features excavated in the roundhouse, but with house walls still standing. The early alignment of post-holes and four-post structure identified beneath the working bulk are visible (images: Mario Wallner).



Figure 4: 3D photo reconstructions of various trenches opened between 2010 and 2013. The image is orientated with north at the bottom, south at the top. The main area of the image shows the excavations at the end of the 2013 excavation season, following the removal of the house walls in trench 2 west extension, as well as the excavation of the terminal of the underlying U-shaped ditch and the completion of the working section through the outer bank. The terminal of the U-shaped ditch aligns with the four-post structure identified to the west, and confirms that the two structures are broadly contemporary and form part of the first boundary and entrance-way through the enclosure (pre-dating the banks). (image: Mario Wallner)



Figure 5: Trench 1 west extension at the beginning of the 2013 season, following removal of the 2012 back-fill and plastic sheeting.

The earliest features excavated this year consist of two postholes; one [673] sealed beneath the primary layer of metalling (656) in the entrance-passage, and one other posthole [669] sealed beneath the body of the bank (607). Posthole 673 was circular in shape, with a diameter of 0.50m



and a depth of 0.60m. It contained large upright packing stones (674) and a dark silty fill (660). Posthole 669 was located immediately in front of the roundhouse platform in the south-western corner of the trench (the roundhouse was excavated in 2011 and 2012). This posthole lay next to a pit [621] which was excavated in 2012. The cut [669] was bowl-shaped in profile, and it had a diameter of 0.70m and a depth of 0.33m. It was filled with packing stones (670) and a dark brown silt (668). Finally, two shallow scoops were identified beneath the inner bank on its northern side. One was assigned cut number 671, and it had a diameter of 0.30m and a depth of only 0.10m. It was filled with a light brown silt (630). The other feature was similar in dimensions and fill, and positioned c. 2m to the east, but this was only identified post-excavation. New context numbers have not been assigned to the latter feature during the post-excavation process, as it is uncertain whether it is an archaeological feature or simply natural undulations in the surface of the hill.

The removal of the working bulk dividing trench 1 west extension and trench 2 west extension revealed an alignment of circular features which ran roughly north-south across the trench (Figures 6, 11 and 13). They have been interpreted as a postholes for a timber fence for an early boundary or entrance façade on the settlement, which is associated with the four-post setting described immediately below (see Figure 13). Four postholes were identified (862, 857, 864 and 860). The most northerly posthole [862] was located c. 1m to the south of the four-poster, and it continued the alignment of the eastern side of the gate-house. It was broadly circular in shape, with a diameter of 0.80m and a depth of 0.20m, and it contained packing stones (863) and a dark brown silt (855). Immediately to the south of this feature was a large stone which, when removed, left an irregularly shaped depression in the natural (857). The next posthole [864] was positioned c. 2.5m to the south of 866; it was circular, with a diameter of 0.50m and a depth of 0.55m. It contained large packing stones (865) and a dark silty fill (858). Finally, the most southern circular feature [860] was 0.40m in diameter and 0.25m deep, and it contained packing stones (861) and a dark brown silt (859). The alignment appears to finish here, although it may be continued on by two postholes positioned on a slightly different alignment (c. 0.50m to the east) and excavated in previous years: posthole [21] excavated in the trial trench 1 opened in 2010 (see Waddington and Karl 2010, 9), and posthole [817] excavated in trench 2 west extension in 2012 (see Waddington and Karl 2015b, 19).



Figure 6: Members of the excavation team standing in the post-alignment and the four-post setting. Two people stand in the double posthole [663] of the four-poster in the foreground, and two additional people stand in the double posthole [651] of the four-poster in the centre of the image.



Figure 7: Shot of posthole 663, showing in situ packing stones (662). This posthole forms part of a four-post structure in the enclosure entrance-way. The metallised surface is visible running along the left-hand side of the posthole, banking up against the edge of the cut and the in situ packing stones.



Figure 8: Shot of double posthole [651], with basal packing stones in situ (667). The metallised surface can be seen on the upper parts of this photograph; this abutted the silty fill of the posthole (650) and the upper packing stones. This posthole forms part of a four-post structure in the enclosure entrance-way.

The associated four-post structure (Figures 11 and 13) consisted of a roughly square-shaped arrangement of four postholes which measured 2m wide at the north end, 2.60m wide at the south end, and 3.40m in length. It consisted of substantial postholes which contained large upright packing stones. The cut for the north-eastern posthole [663] was oval in shape, measuring 0.80m by 1m. This was a double posthole (it contained a distinct and additional circular cut on its southern end, which was 0.50m in diameter); the sides were nearly vertical. Along the edges of the cut were large in situ



packing stones (see Figure 7). The adjacent, northern circular posthole [665] had a diameter of 0.60m and a depth of 0.40m and it contained large packing stones (666) and a dark brown silt (664). The cut for the south-eastern posthole [866] was curvilinear in shape, with a diameter of c. 0.90m-1.10m and a depth of only 0.45m. It also contained substantial packing stones (867) and a dark brown silty fill (854). Finally, the south-western feature [651] consisted of another double posthole, which had an overall diameter of 0.90m and a depth of 0.40m, but which contained two circular post-pads with diameters of 0.40m (Figure 8). It contained substantial packing stones (667) and a dark brown silty fill (650).

A primary layer of metalling (656) ran through the centre of the four-post setting (Figures 7–10). This consisted of tightly packed layer of stones which were noticeably of a slightly smaller-size than the stones forming the overlying, upper layer of metalling (603). It was laid down when the four-post structure was already erected, as the cobbled surface banked up against the edges of the postholes (e.g. see Figures 7, 9 and 10). This trackway was 2m wide: it ran from the northern edge of the trench, curving inwards (and to the west) as it ran through the four-post setting, and terminating 2m to the west. This layer of metalling widened to 4m on the inside of the four-post setting, and it partially ran underneath of edge of the inner bank (607), which is clearly a later structure. We can therefore be confident that the entire entrance through the inner boundary of the earliest wooden enclosure is present within this trench. This primary layer of metalling is broadly contemporary with a yellowish mid-brown silt (658), which ran along the northern edge of the four-post structure and contained infrequent stones.



Figure 9: Working shot of the postholes of the four-post structure (large stones in foreground and back ground), showing the metallised surface running through the area demarcated by the posts.





Figure 10: Photo showing the lower layer of the metallised surface (656), running between the four-post setting, which is unexcavated in this image.

One additional posthole [634] was located in the area immediately in front and to the west of the four-post setting. This feature had also been identified in 2012 but it remained unexcavated due to time-restraints, and it was partially sealed by the upper layer of metallised surface (603), and so is presumably broadly contemporary with the four-post setting. The circular cut [634] for this feature was 0.50m in diameter and it had a depth of 0.40m. It was filled with large packing stones (672) and a dark brown silt (631). A fragment of a jet bracelet (SF 384) was deposited at the bottom of this fill (see Appendix).

The next phase in the sequence concerns the construction of the in-turn to the inner bank and the creation of another metallised surface. The remaining section of the inner bank (607, sitting in cut 10) left in this trench was fully excavated. These deposits are described in detail in the previous interim report (Waddington and Karl 2015b, 14–17) and will not be repeated here. A second layer of metalling (603) ran through the entrance-passage through the inner bank, and partially banked up against the inner facing stones of the bank (see Waddington and Karl 2015b, 13) and thus post-dates the construction of the inner bank, although it is broadly contemporary with the use of the entrance in this phase. This later layer of metalling partially overlay the upper fills of the postholes associated with the four-post setting. It was also a more extensive layer, running along the northern edge of the trench and extending for some distance into trench 2, and it is clearly the entrance-passage associated with the stone-built double ringwork (for description of this layer, see Waddington and Karl 2015b, 13).

Finally, topsoil 03 covered the entire trench.

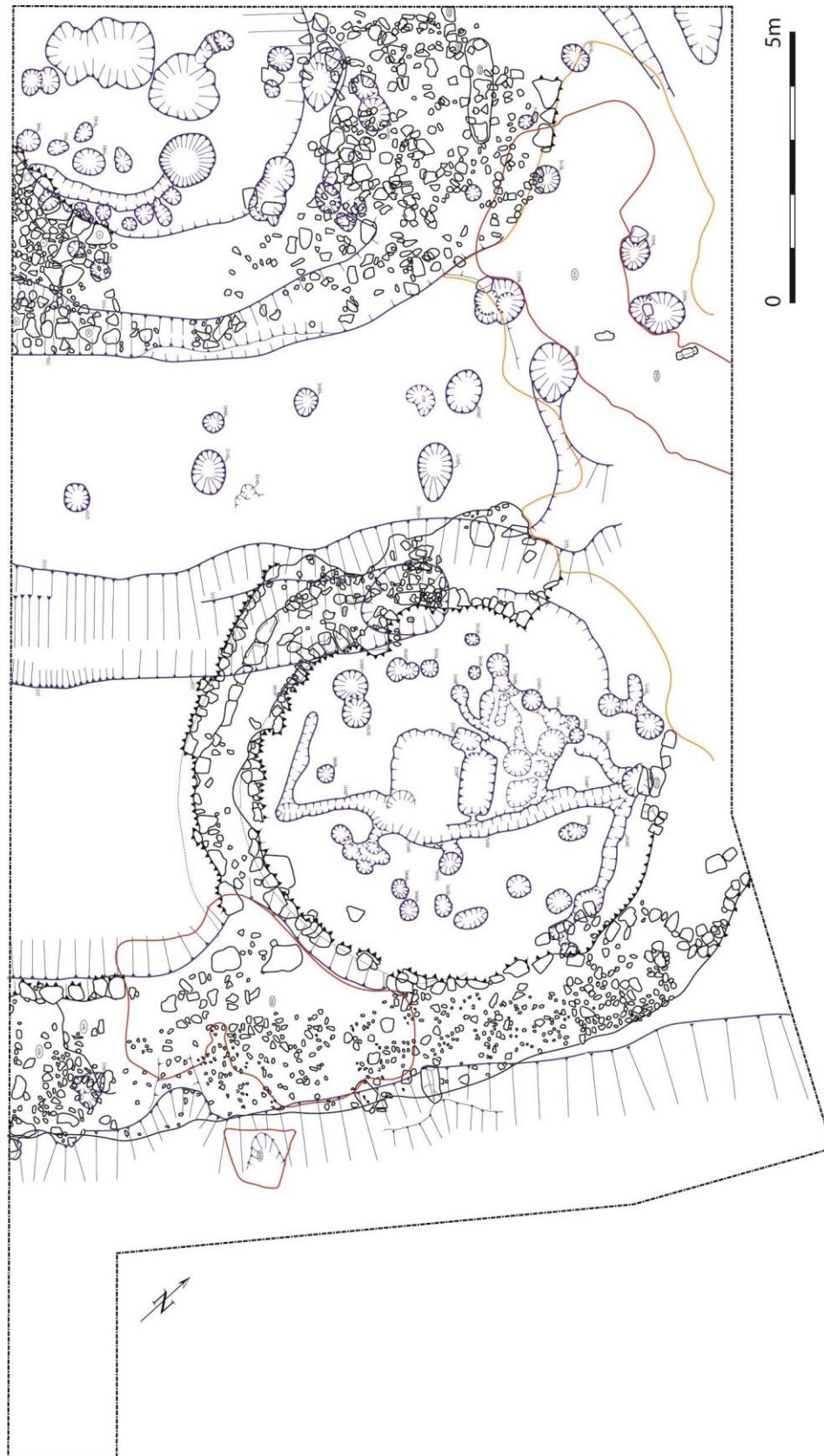


Figure 11: Plan of all features in trenches opened in 2010, 2011 and 2012. The in-turn for the inner bank is visible in trench 1 west extension, on the right-hand side of the image. The outer bank, and the later roundhouse set into it, is shown in trench 2 extension. The edge of the primary metallised surface (656) is shown in red line, and the upper metallised surface (603) is shown in yellow line.



### ***Trench 2 West Extension and Trench 2***

Excavations in trench 2 west extension focussed on completing the excavations of all features and deposits associated with the roundhouse. The house walls were then removed to expose the cut for the roundhouse and the quarry hollow, and the fills of the underlying U-shaped ditch which formed the earliest boundary on the settlement were excavated (Figures 11 and 12). A 4m-wide slot was also excavated through the outer bank and corresponding deposits on the outside of the bank (in the area labelled trench 2). A 2m wide extension trench, labelled trench 4, was also opened (see Figure 12 below) to investigate the extent of the metallised surface: only the topsoil in this new area was removed and the underlying archaeology planned. This latter trench, and a narrow strip of the main trench, was covered in black plastic and reopened and extended in the 2014 excavations. This section will examine the entire sequence in trench 2 and trench 2 west extension.



Figure 12: Trench 1 west extension and trench 2 west extensions joined together, with working bulk removed. The extension (trench 4) is visible in the foreground; only the topsoil in this trench was removed and the archaeology planned.

The U-shaped ditch was the first major boundary on the settlement; it was first identified in 2010, when a narrow trial trench through the west end of the quarry hollow was examined (Waddington and Karl 2010, 8–9). This feature also forms the earliest archaeology in the 2013 trench, and is thus described first. The ditch is broadly orientated north-south, and extends for some 8m into the trench from the southern section (Figure 13). The upper fills of this feature were substantially truncated by the cut for the quarry hollow [155] and the later roundhouse [338], and hence the original width and depth of the ditch is at present unknown, but it was at least 1.5m wide. This ditch shows up clearly on the Ground Penetrating Radar Survey that was carried out in 2012 (see Waddington and Karl 2015b, 4–5, figure 4; Figure 14) – it is a narrow cut feature which encircles the entire enclosure and it may well have provided a foundation trench for a timber palisade boundary. This interpretation is supported by the presence of large stone blocks along the base of the cut (22), some of which were

preserved in upright positions (Figures 15 and 16). Five working sections were created along the length of the ditch; these were recorded before the entire feature was fully excavated. Two sections were recorded through the northern ditch terminal (sections 1 and 2), two sections through the middle of the ditch in this trench, and one through the southern end of the ditch in this trench (section 5).

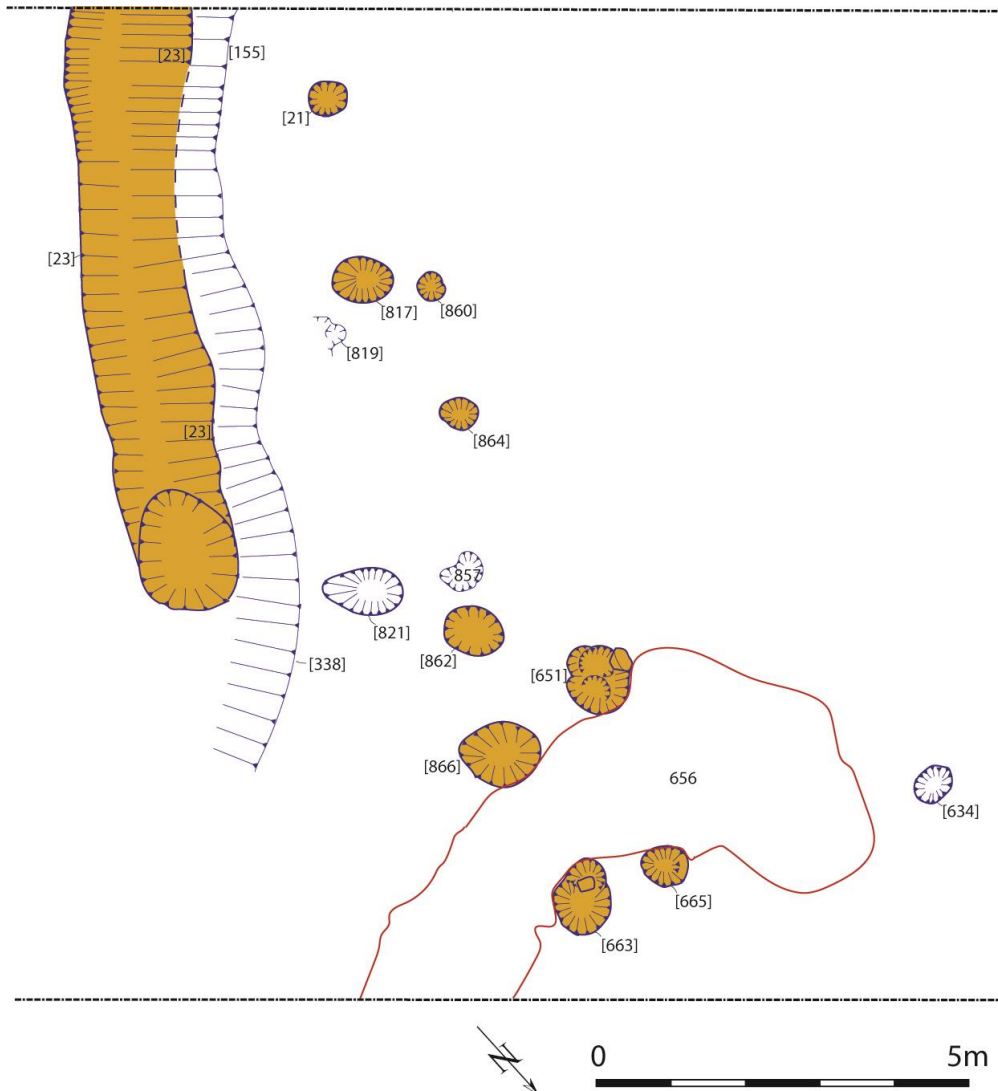


Figure 13: Plan of phase 1 enclosure (features in orange), showing the U-shaped ditch [23] for possible palisade, which is truncated by the later cut for the quarry hollow [155] and cut for the roundhouse [338] (shown on this plan for orientation purposes), as well as the post-alignment and associated four-post structure or entrance gate-house, and associated metallised surface or trackway running through the entrance-way.

The cut [23] was U-shaped in profile, with a flat bottom. Section 1 comprised the most northern slot through the terminal of the ditch. Here, the cut [23] measured 1m wide and 0.40m deep. The terminal was marked by the creation of a broadly oval-shaped feature, measuring c. 1.5m in diameter. It was filled with orange-brown sandy silt (22) which contained some medium-sized stones along the edge of the cut on one side. Section 2 cut through a wider section of the ditch. Here, the cut was 1.70m wide and 0.50m deep, and the fill (23) contained large stone blocks. The cut in section 3 was 1.5m wide and 0.65m deep, and large stone blocks, some of which were in an upright position, were also positioned along the base of the cut (fill 23). The cuts recorded in section 4 and section 5



were noticeably narrower and shallower, being only 1.20m in width and 0.30m deep in section 4, and 0.80m and 0.25m in section 5.

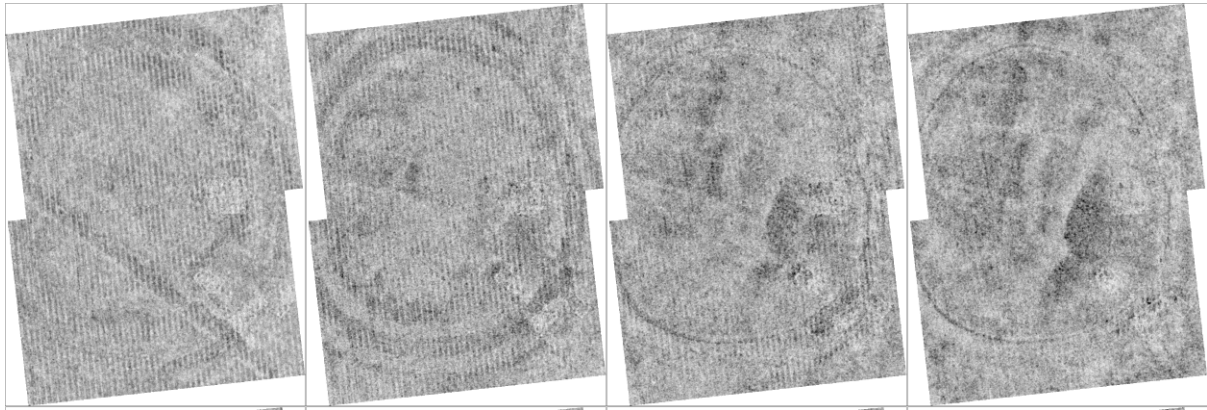


Figure 14: The results of the ground penetrating radar survey, showing raw data in 0.30m depth slices through the site. The first image on the left shows topsoil and the position of trenches as excavated in 2012, when the survey was carried out. The second image along shows the banks and quarry hollow of the double ringwork enclosure clearly (0.30-0.60m below topsoil), and the third and fourth images along show the U-shaped ditch [23] or palisade trench which visibly encircles the entire enclosure (0.60-0.90m below topsoil, and 0.90-1.20m below topsoil, respectively).



Figure 15: Large stone blocks in basal fill (22) of the U-shaped ditch [23]. Some are positioned in upright position and probably formed packing stones for a timber post palisade.





Figure 16: Large stone blocks in basal fill (22) of the U-shaped ditch [23].

Several possible iron objects were discovered in, or close to, the ditch terminal (SF numbers 379, 380, 381, 382, and 383), including two possible blades (SF 383, 380), and some additional badly corroded iron objects were identified in the working bulks in the central and southern end of the feature (SF numbers 389 and 390). All of these objects were so badly corroded that they crumbled into small fragments during excavation, but if they are indeed iron objects, they indicate the location of structured depositional practices in the terminal of the boundary. These objects need to be examined via an XRF machine, in order to determine whether they are iron objects or simply represent natural processes of iron mineralisation within the soils.

Possibly broadly contemporary with this early boundary was an area of tightly packed small cobbles (886), found preserved beneath the outer bank (see Figures 11 and 17). This metallised surface may be contemporary with the primary metallised surface (656) identified in trench 1 west extension (see above); the western edge of the layer had clearly been truncated by the cuts for the quarry hollow [155], and later, by the terrace cut [338] for the roundhouse, and its eastern edge was truncated by the shallow cut for the quarry scoop [487] which was located behind the outer bank. This suggests that the roughly cobbled surface was originally more extensive, and possibly provided a gathering area located on the front of the enclosure. A circular feature [889] with a diameter of 0.25m was suspected to cut through the layer of metallising. Excavation of the sterile mid-brown fill (888) proved that it was a shallow feature and it may well simply represent a small area in the surface that was devoid of stones.





Figure 17: the metallised surface discovered underneath the main body of the outer bank in trench 2 extension.

The next phase of occupation sees the construction of the outer bank. A 4m-wide slot was excavated through this feature on the southern side of the trench. The construction of this boundary involved the creation of shallow quarry scoops and hollows, which cut away the natural slope of the hill-side, thereby creating an artificial raised platform where the outer bank could be located, thereby enhancing the visual appearance and height of the boundary. The subsoil sitting on top of this hill-slope (478), along with a shallow but heavily compacted area of metallising (888; discussed immediately above; Figure 17), was truncated along its eastern edge by the cut for a shallow quarry scoop [51 = 487], and along its western edge by the more extensive cut for the quarry hollow [155]. These features are very different in character. The shallow quarry scoop was only 0.15m deep and 1.30m wide, whereas the wide quarry hollow on the inside of the bank was 0.70m deep and 7.5m



wide. The excavation of these features in prehistory provided the material to create the outer bank, which was a simple dump rampart, positioned in-between the two cuts, and containing frequent medium-large rounded and angular stones in a dark brown silt (49; see Figures 18–20). The bank in this area did not have many inner facing stones preserved, with only two large blocks (72 = 486) located on the southern side of the trench, just behind the later house wall (see Figure 21). This differs from the area excavated in trench 1 east extension in 2011, where a single course of large facing stones was identified (context 486; Waddington and Karl 2015a, 5, fig. 5). The relative absence of inner facing stones in this area is largely due to the fact that much of the inner face of the bank was cut away during the construction of the later roundhouse (see below), which was physically set into the inside edge of the inner bank. The bank in the area where the house was inserted was therefore slightly narrower than its usual 3m-width, being only 2m wide. As observed in trench 1 east extension in 2011, the body of the bank was also significantly slighted here, being only between 0.35m-0.50m high. It seems likely that by the time the roundhouse was occupied, the banks merely provided conceptual boundaries rather than physical barriers.

A soft dark brown silt (52) filled the shallow quarry scoop [51] on the outside of the outer bank. This was c. 15m thick. Partially overlying this fill, as well as the eastern side of the bank, was a slump of bank material (54). This was a spread of small-to-medium-sized stones in a dark grey silt, measuring c. 0.20m thick and extending for some 3m from the top of the bank.



Figure 18: Shot of the section excavated through the bank (49), following the removal of bank slump 54.





Figure 19: Shot of the section excavated through the bank (49), following the removal of bank slump 54.



Figure 20: Working shot of the section excavated through the bank (49), following the removal of the bank.

The next activity concerns the construction of the roundhouse (Figure 21). This was positioned within a cut [338], which truncated the quarry hollow [155] and its lowest fill (460), as well as the inner face of the outer bank (49) and its inner facing stones (72). Overall, the cut measured 9m in diameter and the house is clearly positioned within the terminal of the existing quarry hollow. The building had an internal diameter of 7m and a north-facing entrance, orientated towards the entrance passage. The building was generally well-preserved, with stone walls measuring c. 1.20m wide, with up to four



courses of neatly laid stones standing to a height of 0.40m on all sides except in the north, where the entrance existed. The wall was made up from an outer wall face of stones (306 = 825), an inner face of stones (305), and a 0.60m-wide core of earth and stones (307). Where the wall was set into the outer bank, it utilised the body of its bank as its wall core, and only inner stone facing (305) existed in this part. As discussed in the 2012 interim report, an external support wall also existed on the southern side of the building (contexts 823 and 824; see Waddington and Karl 2015b, 21, fig. 21; Figure 21).

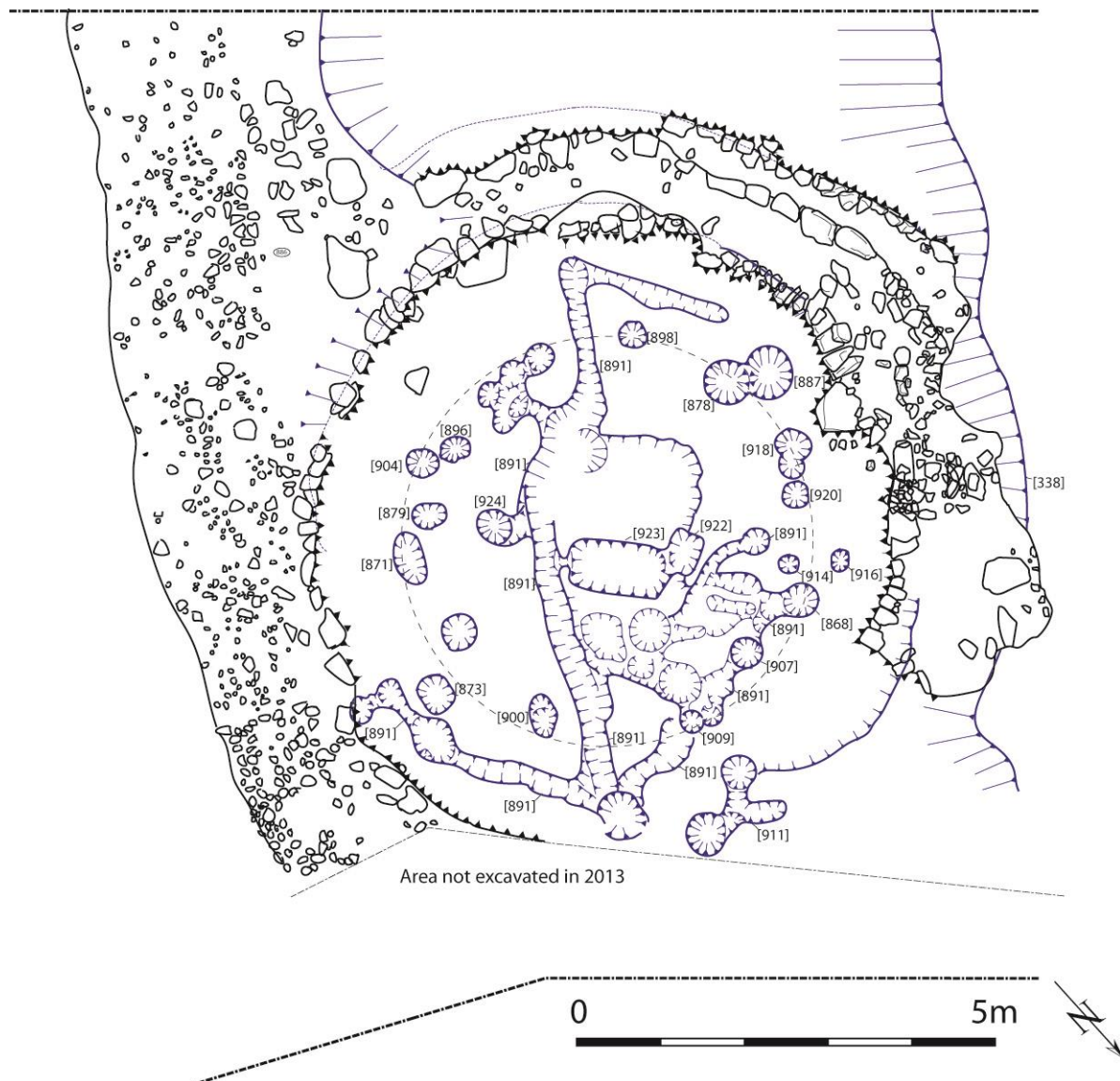


Figure 21: Plan of the roundhouse in trench 2 west extension, showing all features in the house floor.

A post-ring in the interior of the house may be contemporary with the construction of the stone walls. This consisted of 17 circular or oval-shaped postholes, with similar diameters, averaging between 0.30-0.40m, and forming a post-ring measuring 5m in diameter and arranged concentrically to the stone walls. This appears to form part of the infrastructure of the house, and served to provide supports for a conical roof and perhaps a first floor. We shall work anti-clockwise around the post-ring (see Figure 21), starting with a posthole [900] in the north end of the building, located to the east of the entrance-way. This posthole [900] was 0.35m in diameter, with a depth of 0.20m and a dark brown silty fill with possible packing stones (901). This lay next to a shallow depression in the



natural, which was not assigned context numbers during excavation. Next came posthole 871, which was 0.27m in diameter, with a depth of 0.18m, and it contained packing stones (872) and a dark brown silt (838). Posthole 879 was 0.45m in diameter, with a depth of 0.15m, and it contained packing stones (880) and a dark brown silt (839). Posthole 904 was 0.33m in diameter, with a depth of 0.24m and a dark brown silt (840). Posthole 896 was 0.40m in diameter, with a depth of 0.15m and a dark brown silt (841). The adjacent postholes were originally excavated as part of the floor drains in this house (891; see below), but following the excavation of this feature, it became clear that three circular-shaped postholes were present here. No context numbers were assigned, but as Figure 21 demonstrates, they clearly form part of this post-ring. The next feature in the ring was posthole 898, which was c. 0.30m in diameter and 0.20m deep, with upright packing stones (899) and a brown silt (845). Posthole 878 was 0.30m in diameter and 0.35m deep, containing large packings stones (877) and a dark brown silt (848). This formed one side of a double posthole, its associated cut [887] being 0.50m in diameter, with a similar depth of 0.30m and a dark brown silt (847). The adjacent feature [918] was broadly figure-of-eight in shape, with an overall length of 0.60m, but a depth of only 0.20m, and it was filled with a grey-brown silt (917). The shape of the cut suggests it was repaired once. Immediately next to this was another shallow feature [920], which had a diameter of 0.30m and a depth of 0.20m, and it was filled with a dark grey silt (929). The next posthole [868] was 0.40m in diameter and 0.24m deep, and it contained a dark brown silt (852). Posthole [907] was 0.35m in diameter and 0.25m deep, and it was filled with a brown silt (906) (Figure 22). Finally, the last posthole [909] forming part of this ring had a diameter of 0.25m, a depth of 0.18m, and it was filled with a dark grey silt (908). This was positioned immediately adjacent to a similar-shaped cut, which was not assigned a context number on excavation, but may represent a repair of posthole 909.



Figure 22: Post-excitation shot of posthole 907, forming part of internal post-ring sitting within the internal floor of the roundhouse.

Also associated with the construction of the house was a complex drainage system [891]. This consisted of one main gully, running roughly north-south for 7m across the house floor. This feature was not entirely excavated in 2013, as it extended beneath the wall of the house in the north end of the building (to the east of the entrance), continuing for some distance before terminating in the

outer enclosure entranceway (see forthcoming report). Within the house, the drain had several branches, running off to the east and west, so that most areas of the house floor were connected by the drainage system. Generally speaking, the cut was c. 0.30-0.35m wide and 0.20-0.25m deep, with gently sloping sides and a flat bottom. The drain [891] was capped along most of its entirety with flat stone slabs (892; equivalent to 319 in trench 2 extension in 2011; and 66 in trench 2, 2010; see Waddington and Karl 2010, 15, fig. 9). The drain connected up with a very shallow working hollow, positioned within the central interior of the post-ring and associated with two pits (922 and hearth 923; see below) and several shallow circular scoops which were not assigned cut numbers on excavation due to their ephemeral nature (see Figure 21).

In the central area of the internal post-ring, sitting within the shallow working hollow discussed above, were the cuts for two rectangular-shaped pits (922 and 923), one of which represents a central hearth [923]. The hearth pit [923] was 1.40m long and 0.63m wide, with a depth of 0.40m (Figure 23). It had nearly vertical sides and a flat bottom. The pit was orientated east-west, and it was connected, on its eastern end, to the main house drain [891]. This feature was filled with a compact, burnt, clayey deposit (894), consisting of reddish-brown and orange lenses. On its western side, the feature connected up to another, smaller rectangular shaped pit [922], measuring 0.26m by 0.20m, with a depth of c. 0.40-0.50m, and filled with a brown silty soil containing ash and charcoal deposits (921). The fill of this feature was noticeably darker than the adjacent hearth, and it appears to represent an ash pit associated with the use of the adjacent hearth.



Figure 23: Shot of the half-section through the internal hearth pit [923], showing fill (894) and associated ash pit [922], with its dark brown fill (921). The excavated internal drain is visible running past the hearth on the left-hand side of the image, connecting up the hearth.



An additional, separate drainage feature [911] was located on the eastern edge of the roundhouse entrance-way. This was irregular in shape, with a roughly Y-shaped plan, and it terminated in two circular-shaped scoops which were assigned the same cut number [911]. This feature was filled with a dark grey stony silt (910 = 912).

A thin occupation horizon covered a large proportion of the central area of the house interior. It consisted of a grey-brown soft silt (843; see Figure 24). This formed an occupation floor and it also infilled the central shallow working hollow and the underlying drains. Due to the extensive nature of this occupation horizon, which covered an area measuring c. 6m long by 2.40m wide, it was sampled relatively intensively for phosphate analysis (on a 0.50m-square grid), so that potential activity areas within the roundhouse floor may be identified. Several finds were recovered from this context, and they include a sherd of coarse pottery from one of the drains (SF 373), possibly briquetage dating to the later Iron Age.



Figure 24: Shot of the interior of the roundhouse, facing east (the outer bank is visible in the background, behind the house). The stone slabs which cap the internal drains are visible within the house floor, and the occupation deposit (843) is visible spreading across the central part of the house.

The remaining features cutting through the floor of the roundhouse are probably associated with the occupation of the building. Sitting just outside the post-ring, on the north-eastern side of the building, was a shallow scoop [873], which had a diameter of 0.45m and a depth of c. 0.10m, and it was filled with a dark grey-brown silt with large amounts of charcoal fragments (833), which appeared to represent a dump of hearth material. Also positioned in the area of the circumference of the post-ring, but on the western side, were two stakeholes positioned c. 0.40m apart (914 and 916), which appear to have formed part of a stake-pair for an internal setting. Stakehole 914 was 0.15m in diameter and 0.13m deep, and it was filled with a dark brown, stony silt (913), while the corresponding stakehole [916] was 0.18m in diameter and 0.09m deep, and filled with a dark brown silt (915). One circular-shaped scoop [924] was also situated on the eastern interior of the internal post-ring, and this was connected with the drain [891]. This had a diameter of c. 0.35m and a depth of only 0.10m. The overlying fills of the roundhouse were excavated in 2012 and are described in a previous interim report (Waddington and Karl 2015b).

Due to the time constraints, a very small corner of the north-eastern section of the house wall was left unexcavated for the 2014 season. This was not felt to be too much of a problem, as the house wall was not preserved in this area, effectively forming part of the heavily slighted remains of the outer bank. The outer bank in this area was fully excavated in 2014, when the entire trench was extended to the north (see forthcoming report on the 2014 excavations).

Due to efforts focussing on the excavation of the bank and the roundhouse, the metalled surface (811) running to the north of the roundhouse also remained unexcavated by the end of the 2013 season. This forms the second, later phase of metalling in the enclosure entrance-way, and it is equivalent to 603 in trench 1 west extension (excavated in 2012; see Waddington and Karl 2015b, 13). This layer was also removed in 2014, when the entrance-way through the outer bank was identified and excavated.

#### **Trench 4**

A 2m-wide extension to trench 2 west extension was created towards the end of the excavation season. Only the topsoil was removed in this area, and the upper surface of the second metalled trackway was planned. This trench was extended to the north in 2014 and the deposits are tackled in a forthcoming interim report.

#### **Preliminary conclusions**

This was a successful excavation season. The large trench, originally opened in 2012, was reopened and mainly finished, and the work has expanded our knowledge of the boundaries and the entrance-ways to the enclosure. We also completed excavations of the stone roundhouse, which was set into the body of the outer bank, and this well-preserved stone structure is contributing information to the nature of roundhouse construction and occupation in this period. Figure 25 shows the position of all the main features and boundaries identified in the area.

In 2012 (see Waddington and Karl 2015b), we had located the in-turn of the inner bank which formed part of a relatively narrow (c. 3 meters wide) entrance passage. The entrance passage had a densely packed layer of cobbling consisting of small pebbles. While examining this layer further in 2013, we were able to expose a second, earlier layer of cobbling consisting of smaller stones, which turned out to be the narrow entrance passage into the earlier timber enclosure. This was clearly associated with the substantial posts of a rectangular timber gatehouse (see Figure 25) located near the north-eastern corner of trench 1 west extension and the north-western corner of trench 2 west extension. This gate-house was associated with a timber post-alignment, which may have provided an impressive timber boundary or an entrance-façade. This is undoubtedly broadly contemporary with the U-shaped ditch which terminates immediately to the east of the gate-house in trench 2 west extension (see below).

Following the removal of the roundhouse in trench 2 west extension, the terminal of the early U-shaped ditch was exposed and excavated (Figure 25). This contained large stone blocks along its base, some of which were positioned in an upright position and it therefore appears to have supported a timber palisade. This is verified by the results of the ground penetrating radar survey. In the ditch terminus, we may have identified a number of possible iron objects, although they were very badly corroded and their interpretation as iron objects will need to be verified via analysis in an X-ray Diffraction machine. Possibly contemporary with this ditch is a layer of cobbling which was sealed by the outer bank. This layer had been truncated by the quarry hollow on the inside of the

bank, the quarry scoop on the outside of the bank, and the cut for the roundhouse, and it probably originally comprised of a much more extensive area of cobbling associated with the entrance-way to the timber enclosure.



Figure 25: Trench 1 west extension and trench 2 extensions combined. Various features are visible. Liliac: early timber palisade and gatehouse. Light blue: u-shaped ditch associated with the timber palisade. Dark blue: timber roundhouse, probably contemporary with the timber palisade. Orange: early phase stone cobbling, forming a cobbled yard outside the timber gatehouse. Red: banks of the later phase, forming the double ringwork – note the inturning entrances. Yellow: cobbled surface of the later phase entrance passage. Brown: Stone roundhouse set into the inner bank near its entrance. Green: Stone roundhouse with timber postring and central ash-pit, built into quarry hollow and outer bank near the end of the occupation sequence of the site (photo: F. Ohl).

The 4m-wide section excavated through the outer bank revealed that no pre-bank features were present (other than the area of cobbling discussed above). The bank was severely slighted in this area, probably when the roundhouse was constructed. We also finished the excavations on the stone roundhouse which had been set into the quarry hollow and the outer bank. In its floor, it had a well-preserved ring of timber posts to support a roof and possibly a first floor, as well as a sizable drainage system and a large ash pit or hearth near the centre (Figure 25).

Just outside the roundhouse entrance, and running roughly east-west through the trench, was a roughly cobbled trackway. This joined up with the later layer of metalling identified in trench 1 west extension; here, the trackway runs through the entrance-way to the inner bank of the stone-built double ringwork enclosure. This trackway also runs through the entrance-way through the outer bank, which lies just outside and to the north of trench 2 west extension (this was excavated in trench 4 in 2014; see forthcoming report).

The majority of the small finds recovered this year consisted of utilised pebbles, such as hammer-stones and smoothers, along with Mynydd Rhiw stone and a few examples of possible metal slag and fired clay. The most interesting finds concern several possible pieces of highly corroded iron, mostly



deposited in the terminal of the U-shaped ditch (see Appendix 1, context 22). These need to be examined in an X-ray Diffraction machine to determine whether they are indeed iron objects or some form of naturally occurring mineralisation within the soils. However, if they do prove to contain iron metal, they suggest that structured depositional activities were performed in the terminal of this feature, which would have served to mark this important threshold to the enclosure. The recovery of a sherd of pottery from the lower fill of the drain in the roundhouse in trench 2 west extension is also interesting, and this may be a sherd of later Iron Age briquetage (context 843, see discussion above). The jet bracelet fragment, which was deposited at the bottom of a posthole in trench 1 west extension (context 631; see Figure 26), is certainly the most spectacular find from the 2013 season. Although it was only in fragmentary state, it is in excellent condition and this would have been an extremely fine and valuable object in the Late Bronze Age or Iron Age, and it hints towards wider gift-exchange networks with other parts of Britain (in this instance, Whitby in Yorkshire, where this stone is sourced).



Figure 26: Shot of shale bracelet fragment (SF 384, from context 631).

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We are extremely grateful the landowners of Meilionydd, the Thomas family at Meilionydd Mawr and Meilionydd Bach, who have generously hosted the excavations and activities and have been tremendously supportive of the work.

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## Appendices

### *Small Finds Register*

SF No.	Trench	Context	Category	Description
326	2 Ext	1	Glass	Small shard of modern glass.
327	2 W Ext	Backfill	Clay	Piece of modern drainage pipe.
328	2 W Ext	Backfill	Clay	Clay pipe stem fragment.
329	1 Ext	Backfill	Stone	sling stone, possible
330	2 W	Backfill	Stone	Possible porous or slag stone.
331	2 W	1	Glass	Clear glass.
332	2 W	1	Pottery	Modern shard of pottery.
333	2 W Ext	822	Stone	rubbing stone or pecking stone, possible
334	2 W Ext	822	Stone	Possible ore stone.
335	2 W Ext	822	Stone	Possible porous/ore stone.
336	2 W Ext	822	Stone	Possible ore stone.
337	2 W Ext	822	Stone	Possible ore stone.
338	2 W Ext	822	Stone	Possible ore stone.
339	2 W Ext	822	Stone	Possible porous/ore stone.
340	2 W Ext	319	Pottery	Possible pottery/decomposing stone.
341	1 W	656	Stone	Slag stone.
342	1 W	656	Stone	Slag stone.
343	1 W	656	Stone	Slag stone.
344	2 W Ext	822	Stone	Smoothing stone.
345	2 W Ext	822	Stone	Hammer.
346	2 W Ext	1	Pottery	18th/19th century pottery.
347	2 W Ext	1	coke? Metal	Small shard of metal.
348	1 Ext	3	Stone	Stone with possible pecked-out face
349	2 W Ext	1	coke? Metal	Small shard of metal.
350	2 W Ext	1	Glass	Shard of modern glass.
351	4	1	Stone	Firecracking work stone.
352	4	1	Slag	Piece of slag.
353	4	1	Stone	Piece of Mynydd Rhiw stone.
354	4	1	Flint	Piece of flint, possible scraper.
355	Spoil	Stray	Stone	Smoothing stone, possible?
356	4	1	Stone	quern fragment?
357	4	1	Stone	quern fragment?
358	4	1	Slag	Piece of slag.
359	Spoil	Stray	Ore?	Possible piece of ore.
360	4	1	Slag	Piece of slag.
361	4	1	Pottery	Piece of modern pottery.
362	4	1	Pottery	Piece of Victorian pottery.

SF No.	Trench	Context	Category	Description
363	4	1	Slag	Piece of slag.
364	2 Ext	54	Stone	Smoothing stone.
365	4	1	slag	slag, five small fragments
366	2 W Ext	823	Fired clay	Daub
367	2 Ext	54	Pottery	Modern pottery.
368	2 W Ext	857	Stone	Possible whetstone.
369	1 Ext	607	Stone	Hammer stone.
370	2 Ext	54	Stone	Smoothing stone, possible?
371	2 W Ext	833	Flint	Flint flake.
372	1 Ext	607	Stone	Fragment (half) a hammer stone.
373	2 W Ext	843	Pottery	Pottery sherd.
374	2 W Ext	843	Iron	Iron fragment.
375	2 W Ext	843	Iron	Iron fragment.
376	2 W Ext	843	Iron	Corroded iron.
377	2 W Ext	847	Stone	quern fragment?
378	2 Ext	886	flint	Flint chip.
379	2 W Ext	22	Iron	Corroded iron.
380	2 W Ext	22	Iron	Corroded iron object, curving shaft c. 10cm long, knife?
381	2 W Ext	22	Iron	Corroded iron object.
382	2 W Ext	22	Iron	Corroded iron object.
383	2 W Ext	22	Iron	Badly corroded iron object, possible blade, c. 20cm long
384	1 W Ext	631	Jet	Partial jet bracelet.
385	2 W Ext	22	Iron	Corroded iron.
386	2 W Ext	22	Iron	Corroded iron.
387	2 W Ext	843	Fired clay	Burnt clay.
388	2 W Ext	22	Stone	Mynydd Rhiw stone, flake
389	2 W Ext	22	Iron	Corroded iron (3 bags). Sheet? Or natural iron mineralisation?
390	2 W Ext	22	Iron	Corroded iron (4 bags). Sheet? Or natural iron mineralisation?
391	2 W Ext	843	Stone	quern fragment?
392	2 W Ext	843	Stone	Hammer/smoothing stone.
393	2 W Ext	921	Bone	Possible bone.
394	2 W Ext	891	Stone	Oddly shaped stone.



*Sample Register*

<b>Sample number</b>	<b>Type</b>	<b>Trench</b>	<b>Context number</b>	<b>Description</b>
275	Soil	T2 W Ext	302	Soil Sample Quarry Baulk
276	Soil	T2 W Ext	822	Soil Sample Baulk
277	Soil	T2 W Ext	822	Soil Sample Baulk
278	Charcoal	T2 W Ext	305	Charcoal Twig
279	Charcoal	T2 W Ext	319	Charcoal Sample
280	Charcoal	T2 W Ext	319	Charcoal Sample
281	Charcoal	T2 W Ext	319	Charcoal Sample
282	Charcoal	T2 W Ext	319	Charcoal Twig
283	Charcoal	T2 W Ext	822	Charcoal Lump
284	Soil	T2 W Ext	858	Soil Sample from fill 855
285	Phosphate	T2 W Ext	11	Phosphate Sample
286	Soil	T2 W Ext	859	Soil Sample from fill 859
287	Soil	T2 W Ext	859	Soil Sample from fill of 858
288	Phosphate	T2 W Ext	11	Phosphate Sample
289	Phosphate	T2 W Ext	11	Phosphate Sample
290	Soil	T2 W Ext	854	Soil Sample from fill of 854
291	Phosphate	T2 W Ext	11	Phosphate Sample
292	Phosphate	T2 W Ext	11	Phosphate Sample
293	Phosphate	T2 W Ext	11	Phosphate Sample
294	Phosphate	T2 W Ext	11	Phosphate Sample
295	Phosphate	T2 W Ext	11	Phosphate Sample
296	Phosphate	T2 W Ext	838	Soil Sample
297	Phosphate	T2 W Ext	11	Soil Sample
298	Phosphate	T2 W Ext	11	Soil Sample
299	Phosphate	T2 W Ext	11	Soil Sample
300	Phosphate	T2 W Ext	11	Soil Sample
301	Phosphate	T2 W Ext	11	Soil Sample
302	Phosphate	T2 W Ext	837	Soil Sample
303	Phosphate	T2 W Ext	843	Phosphate Sample
304	Phosphate	T2 W Ext	843	Phosphate Sample
305	Phosphate	T2 W Ext	843	Phosphate Sample
306	Phosphate	T2 W Ext	843	Phosphate Sample
307	Phosphate	T2 W Ext	843	Phosphate Sample
308	Phosphate	T2 W Ext	843	Phosphate Sample
309	Phosphate	T2 W Ext	843	Phosphate Sample
310	Phosphate	T2 W Ext	843	Phosphate Sample
311	Phosphate	T2 W Ext	843	Phosphate Sample
312	Phosphate	T2 W Ext	843	Phosphate Sample
313	Phosphate	T2 W Ext	843	Phosphate Sample
314	Phosphate	T2 W Ext	843	Phosphate Sample

Sample number	Type	Trench	Context number	Description
315	Phosphate	T2 W Ext	843	Phosphate Sample
316	Phosphate	T2 W Ext	843	Phosphate Sample
317	Phosphate	T2 W Ext	843	Phosphate Sample
318	Phosphate	T2 W Ext	843	Phosphate Sample
319	Phosphate	T2 W Ext	843	Phosphate Sample
320	Phosphate	T2 W Ext	843	Phosphate Sample
321	Phosphate	T2 W Ext	843	Phosphate Sample
322	Phosphate	T2 W Ext	843	Phosphate Sample
323	Phosphate	T2 W Ext	843	Phosphate Sample
324	Phosphate	T2 W Ext	853	Phosphate Sample
325	Phosphate	T2 W Ext	11	Phosphate Sample
326	Phosphate	T2 W Ext	11	Phosphate Sample
327	Phosphate	T2 W Ext	853	Phosphate Sample
328	Phosphate	T2 W Ext	853	Phosphate Sample
329	Phosphate	T2 W Ext	853	Phosphate Sample
330	Phosphate	T2 W Ext	853	Phosphate Sample
331	Phosphate	T2 W Ext	852	Phosphate Sample
332	Phosphate	T2 W Ext	852	Phosphate Sample
333	Phosphate	T2 W Ext	11	Phosphate Sample
334	Phosphate	T2 W Ext	11	Phosphate Sample
335	Charcoal	T2 W Ext	824	Charcoal Sample
336	Phosphate	T2 W Ext	11	Phosphate Sample
337	Charcoal	T2 W Ext	824	Charcoal Sample
338	Phosphate	T2 W Ext	11	Phosphate Sample
339	Phosphate	T2 W Ext	11	Phosphate Sample
340	Phosphate	T2 W Ext	843	Phosphate Sample
341	Phosphate	T2 W Ext	843	Phosphate Sample
342	Phosphate	T2 W Ext	843	Phosphate Sample
343	Soil	T2 W Ext	824	Soil Sample
344	Phosphate	T2 W Ext	843	Phosphate Sample
345	Phosphate	T2 W Ext	843	Phosphate Sample
346	Phosphate	T2 W Ext	843	Phosphate Sample
347	Phosphate	T2 W Ext	843	Phosphate Sample
348	Phosphate	T2 W Ext	843	Phosphate Sample
349	Phosphate	T2 W Ext	843	Phosphate Sample
350	Phosphate	T2 W Ext	843	Phosphate Sample
351	Phosphate	T2 W Ext	843	Phosphate Sample
352	Phosphate	T2 W Ext	843	Phosphate Sample
353	Phosphate	T2 W Ext	836	Phosphate Sample
354	Phosphate	T2 W Ext	11	Phosphate Sample
355	Charcoal	T2 W Ext	824	Charcoal Sample



<b>Sample number</b>	<b>Type</b>	<b>Trench</b>	<b>Context number</b>	<b>Description</b>
356	Phosphate	T2 W Ext	11	Phosphate Sample
357	Phosphate	T2 W Ext	843	Phosphate Sample
358	Phosphate	T2 W Ext	11	Phosphate Sample
359	Phosphate	T2 W Ext	843	Phosphate Sample
360	Phosphate	T2 W Ext	843	Phosphate Sample
361	Phosphate	T2 W Ext	11	Phosphate Sample
362	Phosphate	T2 W Ext	11	Phosphate Sample
363	Phosphate	T2 W Ext	11	Phosphate Sample
364	Phosphate	T2 W Ext	833	Phosphate Sample
365	Phosphate	T2 W Ext	833	Phosphate Sample
366	Phosphate	T2 W Ext	11	Phosphate Sample
367	Phosphate	T2 W Ext	11	Phosphate Sample
368	Charcoal	T2 W Ext	852	Charcoal Sample
369	Phosphate	T2 W Ext	11	Phosphate Sample
370	Phosphate	T2 W Ext	11	Phosphate Sample
371	Phosphate	T2 W Ext	11	Phosphate Sample
372	Phosphate	T2 W Ext	11	Phosphate Sample
373	Charcoal	T1 Ext	607	Charcoal Sample
374	Phosphate	T2 W Ext	11	Phosphate Sample
375	Phosphate	T2 W Ext	11	Phosphate Sample
376	Phosphate	T2 W Ext	834	Phosphate Sample
377	Phosphate	T2 W Ext	11	Phosphate Sample
378	Phosphate	T2 W Ext	11	Phosphate Sample
379	Phosphate	T2 W Ext	11	Phosphate Sample
380	Phosphate	T2 W Ext	11	Phosphate Sample
381	Charcoal	T2 W Ext	852	Charcoal Sample
382	Phosphate	T2 W Ext	843	Phosphate Sample
383	Phosphate	T2 W Ext	843	Phosphate Sample
384	Phosphate	T2 W Ext	843	Phosphate Sample
385	Phosphate	T2 W Ext	843	Phosphate Sample
386	Phosphate	T2 W Ext	843	Phosphate Sample
387	Phosphate	T2 W Ext	843	Phosphate Sample
388	Phosphate	T2 W Ext	843	Phosphate Sample
389	Charcoal	T2 W Ext	838	Charcoal Sample
390	Phosphate	T2 W Ext	843	Phosphate Sample
391	Phosphate	T2 W Ext	843	Phosphate Sample
392	Phosphate	T2 W Ext	843	Phosphate Sample
393	Phosphate	T2 W Ext	843	Phosphate Sample
394	Phosphate	T2 W Ext	843	Phosphate Sample
395	Phosphate	T2 W Ext	843	Phosphate Sample
396	Phosphate	T2 W Ext	843	Phosphate Sample

Sample number	Type	Trench	Context number	Description
397	Phosphate	T2 W Ext	843	Phosphate Sample
398	Phosphate	T2 W Ext	843	Phosphate Sample
399	Phosphate	T2 W Ext	11	Phosphate Sample
400	Charcoal	T2 W Ext	833	Charcoal Sample
401	Phosphate	T2 W Ext	11	Phosphate Sample
402	Phosphate	T2 W Ext	11	Phosphate Sample
403	Phosphate	T2 W Ext	11	Phosphate Sample
404	Phosphate	T2 W Ext	11	Phosphate Sample
405	Phosphate	T2 W Ext	11	Phosphate Sample
406	Phosphate	T2 W Ext	11	Phosphate Sample
407	Phosphate	T2 W Ext	11	Phosphate Sample
408	Phosphate	T2 W Ext	11	Phosphate Sample
409	Phosphate	T2 W Ext	11	Phosphate Sample
410	Phosphate	T2 W Ext	11	Phosphate Sample
411	Phosphate	T2 W Ext	11	Phosphate Sample
412	Phosphate	T2 W Ext	11	Phosphate Sample
413	Phosphate	T2 W Ext	11	Phosphate Sample
414	Phosphate	T2 W Ext	11	Phosphate Sample
415	Phosphate	T2 W Ext	11	Phosphate Sample
416	Phosphate	T2 W Ext	11	Phosphate Sample
417	Phosphate	T2 W Ext	11	Phosphate Sample
418	Phosphate	T2 W Ext	11	Phosphate Sample
419	Phosphate	T2 W Ext	11	Phosphate Sample
420	Phosphate	T2 W Ext	11	Phosphate Sample
421	Phosphate	T2 W Ext	11	Phosphate Sample
422	Phosphate	T2 W Ext	11	Phosphate Sample
423	Phosphate	T2 W Ext	11	Phosphate Sample
424	Phosphate	T2 W Ext	11	Phosphate Sample
425	Phosphate	T2 W Ext	11	Phosphate Sample
426	Charcoal	T2 W Ext	852	Charcoal Sample
427	Phosphate	T2 W Ext	11	Phosphate Sample
428	Phosphate	T2 W Ext	843	Phosphate Sample
429	Phosphate	T2 W Ext	11	Phosphate Sample
430	Phosphate	T2 W Ext	843	Phosphate Sample
431	Phosphate	T2 W Ext	11	Phosphate Sample
432	Phosphate	T2 W Ext	11	Phosphate Sample
433	Phosphate	T2 W Ext	843	Phosphate Sample
434	Phosphate	T2 W Ext	11	Phosphate Sample
435	Phosphate	T2 W Ext	843	Phosphate Sample
436	Phosphate	T2 W Ext	843	Phosphate Sample
437	Charcoal	T2 W Ext	827	Charcoal Sample



<b>Sample number</b>	<b>Type</b>	<b>Trench</b>	<b>Context number</b>	<b>Description</b>
438	Phosphate	T2 W Ext	11	Phosphate Sample
439	Phosphate	T2 W Ext	11	Phosphate Sample
440	Phosphate	T2 W Ext	11	Phosphate Sample
441	Phosphate	T2 W Ext	11	Phosphate Sample
442	Charcoal	T2 W Ext	843	Charcoal Sample
443	Phosphate	T2 W Ext	843	Phosphate Sample
444	Phosphate	T2 W Ext	843	Phosphate Sample
445	Phosphate	T2 W Ext	843	Phosphate Sample
446	Phosphate	T2 W Ext	843	Phosphate Sample
447	Phosphate	T2 W Ext	843	Phosphate Sample
448	Phosphate	T2 W Ext	843	Phosphate Sample
449	Charcoal	T2 W Ext	843	Charcoal Sample
450	Phosphate	T2 W Ext	843	Phosphate Sample
451	Phosphate	T2 W Ext	843	Phosphate Sample
452	Phosphate	T2 W Ext	11	Phosphate Sample
453	Phosphate	T2 W Ext	843	Phosphate Sample
454	Phosphate	T2 W Ext	11	Phosphate Sample
455	Phosphate	T2 W Ext	843	Phosphate Sample
456	Phosphate	T2 W Ext	11	Phosphate Sample
457	Phosphate	T2 W Ext	11	Phosphate Sample
458	Phosphate	T2 W Ext	11	Phosphate Sample
459	Phosphate	T2 W Ext	843	Phosphate Sample
460	Phosphate	T2 W Ext	843	Phosphate Sample
461	Phosphate	T2 W Ext	843	Phosphate Sample
462	Phosphate	T2 W Ext	843	Phosphate Sample
463	Phosphate	T2 W Ext	843	Phosphate Sample
464	Phosphate	T2 W Ext	843	Phosphate Sample
465	Phosphate	T2 W Ext	843	Phosphate Sample
466	Phosphate	T2 W Ext	843	Phosphate Sample
467	Phosphate	T2 W Ext	843	Phosphate Sample
468	Phosphate	T2 W Ext	843	Phosphate Sample
469	Phosphate	T2 W Ext	843	Phosphate Sample
470	Phosphate	T2 W Ext	853	Phosphate Sample
471	Phosphate	T2 W Ext	853	Phosphate Sample
472	Phosphate	T2 W Ext	843	Phosphate Sample
473	Phosphate	T2 W Ext	853	Phosphate Sample
474	Phosphate	T2 W Ext	848	Phosphate Sample
475	Phosphate	T2 W Ext	846	Phosphate Sample
476	Phosphate	T2 W Ext	853	Phosphate Sample
477	Phosphate	T2 W Ext	853	Phosphate Sample
478	Phosphate	T2 W Ext	844	Phosphate Sample

Sample number	Type	Trench	Context number	Description
479	Phosphate	T2 W Ext	853	Phosphate Sample
480	Soil	T2 W Ext	307	Soil Sample
481	Phosphate	T2 W Ext	843	Phosphate Sample
482	Phosphate	T2 W Ext	843	Phosphate Sample
483	Charcoal	T2 W Ext	307	Charcoal Sample
484	Phosphate	T2 W Ext	853	Phosphate Sample
485	Phosphate	T2 W Ext	844	Phosphate Sample
486	Phosphate	T2 W Ext	853	Phosphate Sample
487	Phosphate	T2 W Ext	853	Phosphate Sample
488	Phosphate	T2 W Ext	853	Phosphate Sample
489	Phosphate	T2 W Ext	853	Phosphate Sample
490	Phosphate	T2 W Ext	853	Phosphate Sample
491	Phosphate	T2 W Ext	853	Phosphate Sample
492	Phosphate	T2 W Ext	853	Phosphate Sample
493	Phosphate	T2 W Ext	852	Phosphate Sample
494	Phosphate	T2 W Ext	851	Phosphate Sample
495	Phosphate	T2 W Ext	843	Phosphate Sample
496	Phosphate	T2 W Ext	850	Phosphate Sample
497	Phosphate	T2 W Ext	853	Phosphate Sample
498	Phosphate	T2 W Ext	843	Phosphate Sample
499	Phosphate	T2 W Ext	847	Phosphate Sample
500	Phosphate	T2 W Ext	847	Phosphate Sample
501	Phosphate	T2 W Ext	847	Phosphate Sample
502	Phosphate	T2 W Ext	848	Phosphate Sample
503	Phosphate	T2 W Ext	853	Phosphate Sample
504	Phosphate	T2 W Ext	307	Phosphate Sample
505	Phosphate	T2 W Ext	307	Phosphate Sample
506	Phosphate	T2 W Ext	853	Phosphate Sample
507	Phosphate	T2 W Ext	853	Phosphate Sample
508	Phosphate	T2 W Ext	853	Phosphate Sample
509	Phosphate	T2 W Ext	853	Phosphate Sample
510	Phosphate	T2 W Ext	853	Phosphate Sample
511	Phosphate	T2 W Ext	853	Phosphate Sample
512	Phosphate	T2 W Ext	853	Phosphate Sample
513	Phosphate	T2 W Ext	853	Phosphate Sample
514	Phosphate	T2 W Ext	853	Phosphate Sample
515	Phosphate	T2 W Ext	853	Phosphate Sample
516	Phosphate	T2 W Ext	853	Phosphate Sample
517	Phosphate	T2 W Ext	853	Phosphate Sample
518	Phosphate	T2 W Ext	853	Phosphate Sample
519	Phosphate	T2 W Ext	853	Phosphate Sample



<b>Sample number</b>	<b>Type</b>	<b>Trench</b>	<b>Context number</b>	<b>Description</b>
520	Phosphate	T2 W Ext	853	Phosphate Sample
521	Phosphate	T2 W Ext	853	Phosphate Sample
522	Phosphate	T2 W Ext	853	Phosphate Sample
523	Phosphate	T2 W Ext	853	Phosphate Sample
524	Charcoal	T2 W Ext	874	Charcoal Sample
525	Charcoal	T2 W Ext	875	Charcoal Sample
526	Charcoal	T2 W Ext	49	Charcoal Sample
527	Soil	T2 W Ext	833	Soil Sample
528	Charcoal	T2 W Ext	49	Charcoal Sample
529	Soil	T2 W Ext	49	Soil Sample
530	Charcoal	T2 W Ext	843	Charcoal Sample
531	Charcoal	T2 W Ext	883	Charcoal Sample
532	Charcoal	T2 W Ext	843	Charcoal Sample
533	Soil	T2 W Ext	848	Soil Sample
534	Charcoal	T2 W Ext	886	Charcoal Sample
535	Charcoal	T2 W Ext	886	Charcoal Sample
536	Charcoal	T2 W Ext	49/886	Charcoal Sample on Context Interface
537	Charcoal	T2 W Ext	843	Charcoal Sample
538	Charcoal	T2 W Ext	843	Charcoal Sample
539	Charcoal	T2 W Ext	853	Charcoal Sample
540	Charcoal	T2 W Ext	843	Charcoal Sample
541	Charcoal	T2 W Ext	843	Charcoal Sample
542	Charcoal	T2 W Ext	843	Charcoal Sample
543	Charcoal	T2 W Ext	843	Charcoal Sample
544	Charcoal	T1 W Ext	657	Charcoal Sample
545	Charcoal	T2 W Ext	843	Charcoal Sample
546	Charcoal	T1 W Ext	657	Charcoal Sample
547	Charcoal	T2 W Ext	843	Charcoal Sample
548	Charcoal	T2 W Ext	843	Charcoal Sample
549	Charcoal	T2 W Ext	843	Charcoal Sample
550	Charcoal	T2 W Ext	886	Charcoal Sample
551	Charcoal	T2 W Ext	22	Charcoal Sample
552	Charcoal	T2 W Ext	843	Large Charcoal Twig
553	Charcoal	T2 W Ext	843	Charcoal Sample
554	Charcoal	T1 W Ext	631	Charcoal Sample
555	Charcoal	T2 W Ext	845	Charcoal Sample
556	Charcoal	T2 W Ext	835	Charcoal Sample
557	Charcoal	T2 W Ext	845	Charcoal Sample
558	Charcoal	T2 W Ext	839	Charcoal Sample
559	Charcoal	T2 W Ext	845	Charcoal Twigs
560	Soil	T2 W Ext	843	Soil Sample

Sample number	Type	Trench	Context number	Description
561	Charcoal	T2 W Ext	845	Charcoal Sample
562	Charcoal	T2 W Ext	22	Charcoal Sample
563	Soil	T2 W Ext	843	Soil Sample
564	Charcoal	T2 W Ext	845	Charcoal Sample
565	Charcoal	T2 W Ext	845	Charcoal Sample
566	Soil	T2 W Ext	902	Soil Sample
567	Charcoal	T2 W Ext	906	Charcoal Sample
568	Charcoal	T2 W Ext	843	Charcoal Sample
569	Charcoal	T2 W Ext	908	Charcoal Sample
570	Charcoal	T2 W Ext	910	Charcoal Sample
571	Charcoal	T2 W Ext	910	Charcoal Sample
572	Soil	T2 W Ext	22	Soil Sample
573	Soil	T2 W Ext	22	Soil Sample
574	Charcoal	T2 W Ext	910	Charcoal Sample
575	Soil	T2 W Ext	22	Soil Sample
576	Charcoal	T2 W Ext	910	Charcoal Sample
577	Soil	T2 W Ext	894	Soil Sample
578	Soil	T2 W Ext	894	Soil Sample
579	Soil	T2 W Ext	894	Soil Sample
580	Soil	T2 W Ext	894	Soil Sample
581	Soil	T2 W Ext	894	Soil Sample
582	Charcoal	T2 W Ext	894	Charcoal Sample
583	Soil	T2 W Ext	894	Soil Sample
584	Soil	T2 W Ext	894	Soil Sample
585	Soil	T2 W Ext	894	Soil Sample
586	Soil	T2 W Ext	894	Soil Sample
587	Soil	T2 W Ext	894	Soil Sample
588	Charcoal	T2 W Ext	894	Charcoal Sample
589	Charcoal	T2 W Ext	894	Charcoal Sample
590	Charcoal	T2 W Ext	894	Charcoal Sample
591	Charcoal	T2 W Ext	894	Charcoal Sample
592	Charcoal	T2 W Ext	894	Charcoal Sample
593	Charcoal	T2 W Ext	894	Charcoal Sample
594	Charcoal	T2 W Ext	921	Charcoal Sample
595	Charcoal	T2 W Ext	894	Charcoal Sample
596	Charcoal	T2 W Ext	921	Charcoal Sample
597	Soil	T2 W Ext	894	Soil Sample
598	Soil	T2 W Ext	894	Soil Sample
599	Charcoal	T2 W Ext	894	Charcoal Sample
600	Charcoal	T2 W Ext	921	Charcoal Sample
601	Soil	T2 W Ext	894	Soil Sample

<b>Sample number</b>	<b>Type</b>	<b>Trench</b>	<b>Context number</b>	<b>Description</b>
602	Charcoal	T2 W Ext	894	Charcoal Sample
603	Charcoal	T2 W Ext	921	Charcoal Sample
604	Soil	T2 W Ext	894	Soil Sample
605	Soil	T2 W Ext	921	Soil Sample
606	Soil	T2 W Ext	921	Soil Sample
607	Soil	T2 W Ext	894	Soil Sample
608	Soil	T2 W Ext	894	Soil Sample
609	Soil	T2 W Ext	894	Soil Sample
610	Soil	T2 W Ext	894	Soil Sample
611	Soil	T2 W Ext	894	Soil Sample
612	Soil	T2 W Ext	894	Soil Sample
613	Soil	T2 W Ext	894	Soil Sample
614	Soil	T2 W Ext	921	Soil Sample
615	Soil	T2 W Ext	921	Soil Sample